REMARKS

In an Office Action mailed June 1, 2006, claims 1-46 were rejected as follows, in which the paragraphs refer to the numbered paragraphs in the Office Action:

- 1. Claims 1-2, 5-6, 13, 22, 29-30, and 37 were rejected under 35 U.S.C. 102(b) over U.S. Patent No. 5,251,218 ("Stone");
- 2. Claims 4 and 32 were rejected under 35 U.S.C. 103(a) over Stone in view of U.S. Patent No. 6,177,964 ("Birleson");
- 3. Claims 7, 27-28, 33, and 45-46 were rejected under 35 U.S.C. 103(a) over Stone in view of U.S. Publ. No. 2001/0041532 ("Tomasz");
- 4. Claims 3 and 31 were rejected under 35 U.S.C. 103(a) over Stone in view of U.S. Publ. No. 2002/0177423 ("Cowley");
- 5. Claims 18, 20, 38, and 40 were rejected under 35 U.S.C. 103(a) over Stone in view of U.S. Patent No. 4,361,906 ("Sakamoto") and further in view of U.S. Publ. 2005/0239499 ("Oosawa");
- 6. Claims 19 and 39 were rejected under 35 U.S.C. 103(a) over Stone in view of Sakamoto, and further in view of Oosawa, and further in view of U.S. Patent No. 6,711,149 ("Yano");
- 7. Claims 21, 25, and 41 were rejected under 35 U.S.C. 103(a) over Stone in view of Sakamoto, claim 42 was rejected under 35 U.S.C. 103(a) over Stone in view of Sakamoto, and further in view of PCT Publ. WO 97/06604 ("Hedstrom");
- 8. Claim 23 was rejected under 35 U.S.C. 103(a) over Stone in view of Hedstrom;
- 9. Claims 34-36 were rejected under 35 U.S.C. 103(a) over Stone in view of U.S. Publ. No. 2003/00083033 ("Staszewski");
- 10. Claim 24 was rejected under 35 U.S.C. 103(a) over Stone in view of Hedstrom and

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- further in view of Birleson;
- 11. Claim 43 was rejected under 35 U.S.C. 103(a) over Stone in view of Tomasz and further in view of Sakamoto;
- 12. Claim 44 was rejected under 35 U.S.C. 103(a) over Stone in view of Sakamoto, and further in view of Staszewski;
- 13. Claims 8-12 were rejected on the ground of nonstatutory double patenting over claims 1-5 of U.S. Patent No. 6,778,117;
- 14. Claims 14-17 and 34-36 were rejected on the ground of nonstatutory double patenting over claims 12, 17-19, and 23-25 of U.S. Patent No. 6,778,117;
- 15. Claims 29-30 and 37 were rejected on the ground of nonstatutory double patenting over claims 20-21 of U.S. Patent No. 6,778,117;
- Claims 1-2 were provisionally rejected on the ground of nonstatutory double patenting over claims 1 and 11 of U.S. Patent Application No. 10/377,573 (1052-0004); and
- 17. Claim 44 was rejected on the ground of nonstatutory double patenting over claim 23 of U.S. Patent No. 6,778,117.

102 Rejection

Claims 1-2, 5-6, 13, 22, 29-30, and 37 were rejected under 35 U.S.C. 102(b) over U.S. Patent No. 5,251,218 ("Stone") as noted in paragraph 1 above. Note that Stone performs this mixing process to provide a *digital output signal*: not only is the local oscillator signal a digital signal (Stone at col. 5, lines 35-38), but so are input signal R_s (Stone at col. 3, lines 18-23) and the mixer output signals (Stone at col. 6, lines 28-33). Thus Stone does not show or suggest a tuner having a mixer with an output terminal for providing an <u>analog</u> output signal at a desired frequency (claim 1), nor a method for mixing a tuned radio frequency signal including a step of mixing the radio frequency signal with the digital local oscillator signal to provide an <u>analog</u> output signal at the desired frequency (claim 29).

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Applicant notes that dependent claims 2-11, 12-22, 25-32, and 34-40 are also not shown or suggested by Stone and are patentable thereover for at least the reasons that their underlying base claims 1 and 29 are patentable. Applicant does not address any additional, independent reasons for patentability at this time.

103 Rejection

Claims 3, 4, 7, 18-21, 23-25, 27-28, 31-36, 38-41, and 43-46 were rejected under 35 U.S.C. 103(a) over Stone in view of either Birleson, Tomasz, Cowley, Sakomoto and Oosawa, Sakamoto and Hedstrom, Hedstrom, Straszewski, or Hedstrom and Birleson as noted in paragraphs 2-13 above. Applicant notes that dependent claims 3, 4, 7, 18-21, 23-25, 27-28, 31-36, 38-41, and 43-46 are also not shown or suggested by Stone in combination with the various other references listed above, and are patentable thereover for at least the reasons that their underlying base claims are patentable. Applicant does not address any additional, independent reasons for patentability at this time.

Double Patenting

Claims 14-17, 29-30, and 34-37 and 44 were rejected on the ground of nonstatutory double patenting over various claims of U.S. Patent No. 6,778,117, as noted above in paragraphs 14, 15, and 17 above. Moreover, claims 1 and 2 were rejected on the ground of nonstatutory double patenting over various claims of U.S. Patent Application No. 10/377,573 (1052-0004), as noted in paragraph 16 above.

In response thereto, Applicants submit herewith a Terminal Disclaimer with respect to the '117 patent and the '573 application. The Terminal Disclaimers should be sufficient to overcome these rejections.

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CONCLUSION

Therefore, Applicant submits that the application is now in condition for allowance. If the Examiner is unable to issue a Notice of Allowance at the next communication and believes that a telephone interview would be appropriate, Applicant respectfully requests the Examiner to contact the undersigned attorney at the phone number listed below.

Respectfully submitted,

8/28/06

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